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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,949	10/10/2001	Ryutaro Oka	Q66636	4803
21171	7590	12/07/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			SY, MARIANO ONG	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/972,949

Applicant(s)

OKA, RYUTARO

Examiner

Mariano Sy

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*MS*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-9 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 is/are allowed.
- 6) ☒ Claim(s) 2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 12, 2004 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olschewski et al. (U.S. Patent Number 4,946,296) in view of French et al. (U.S. Patent Number 6,161,962).

Re-claims 2 and 4 Olschewski et al. discloses, as shown in fig. 1, a rolling bearing assembly having a pulse generator 13 (detecting rotational movement), said bearing assembly comprises: a stationary 4 and rotary 19 bearing rings one positioned inside the other; a sealing member 10 secured to the stationary bearing ring; and the pulse generator secured to the sealing member, wherein the sealing member includes a plate-like core metal 9 fitted to the stationary bearing ring, and an elastic member 22

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made of one of rubber and resin and integrated together with the core metal and wherein the pulse generator is secured to a plate surface 8 of the core metal in contact therewith, the pulse generator is not secured to the core metal by the elastic member; wherein the pulse generator is fixed to the sealing member by means of an integral molding of the elastic member with the metal core. However

Olschewski et al. fail to disclose a temperature sensor.

French et al. teaches bearing with sensor module B that may contain a speed 110, temperature 112, and acceleration sensor 114.

It would have been obvious to one of ordinary skill in the art to have utilized the known sensor module into the bearing assembly of Olschewski et al., in view of the teaching of French et al., in order to detect the temperature in the interior of the bearing so as to detect bearing failure.

Re-claims 6 and 7 Olschewski et al. discloses, as shown in fig. 1, a rolling bearing assembly including stationary 4 and rotary 19 bearing rings, one positioned inside the other, and a pulse generator 13 (detecting rotational movement), the rolling bearing assembly comprising: a sealing member 10 secured to the stationary bearing ring and comprising a core metal 9 and an elastic member 22 made of one of rubber and resin and integrated together with the core metal, the pulse generator contacting and being affixed to a plate surface 8 of the core metal, wherein the pulse generator is not secured to the core metal by the elastic member; wherein said pulse generator is integrally molded with the elastic member.

Olschewski et al. fail to disclose a temperature sensor.

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French et al. teaches bearing with sensor module B that may contain a speed 110, temperature 112, and acceleration sensor 114.

It would have been obvious to one of ordinary skill in the art to have utilized the known sensor module into the bearing assembly of Olschewski et al., in view of the teaching of French et al., in order to detect the temperature in the interior of the bearing so as to detect bearing failure.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olschewski et al. in view of French et al. as applied to claim 2 above, and further in view of Gomez et al. (U.S. Patent Number 5,833,371).

Re-claim 5 Olschewski et al. as modified was silent to disclose the temperature sensor 112 is a chip-type laminar thermistor. Gomez et al. teaches the use of thermistor as temperature sensor in col. 1, lines 35-36. It would have been obvious to one of ordinary skill in the art to have merely utilized the known thermistor for use as a temperature sensor into the bearing assembly of Olschewski et al. as modified, in view of the teaching of Gomez et al., in order to get an accurate reading of the temperature inside the bearing depending upon the type of application, cost, and availability.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 703-308-3427. The examiner can normally be reached on Mon.-Fri. from 9:00 A.M. to 3:00 P.M.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

November 29, 2004

  
MATTHEW C. GRAHAM  
PRIMARY EXAMINER  
GROUP 310